3.1 THRESHOLDS OF SIGNIFICANCE

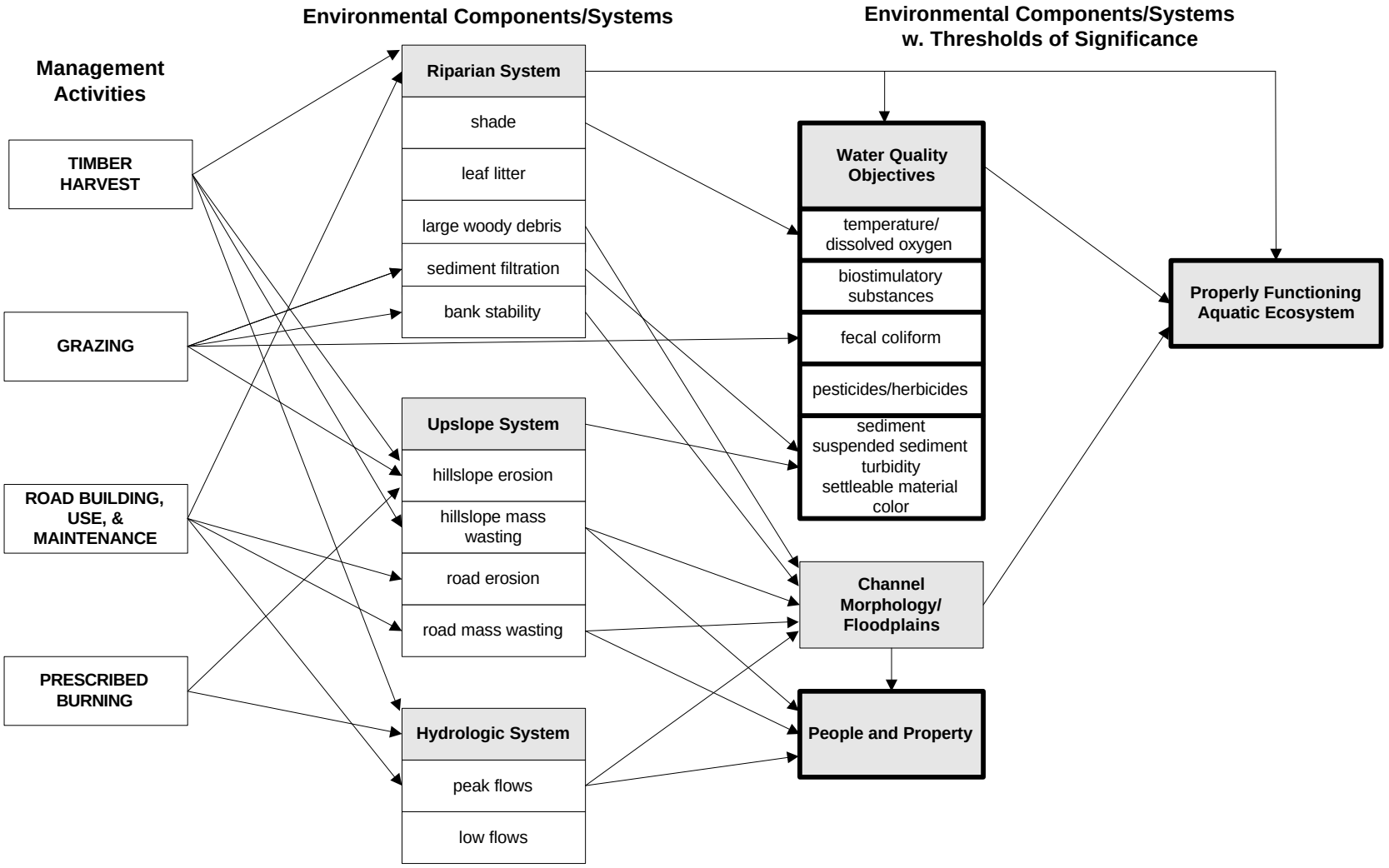
Thresholds of significance are defined for each of the resource areas within their individual sections in Chapter 3. These thresholds of significance meet the requirement under CEQA to identify the effects related to a proposed project in relation to specific parameters, and then to determine whether these effects are beneficial, less than significant, significant, or unavoidable in relation to the specific parameter or threshold. The thresholds of significance are defined in an introductory section placed immediately before the detailed discussion of environmental effects in all of the sections in Chapter 3. Many of the resource areas above have a variety of individual potential effects and individually identified thresholds of significance. Most of these thresholds in each section stand alone. For the following sections and related environmental components, however, the relationships of the thresholds of significance are more complicated and are interrelated:

- Watersheds, Hydrology, and Floodplains (Section 3.4)
- Soils and Geomorphology (Section 3.6)
- Wetlands and Riparian Lands (Section 3.7), and
- Fish and Aquatic Habitat (Section 3.8)

With the exception of wetlands (which have their own specific threshold of significance defined), the effects associated with the environmental components of these resource areas are closely related and these interrelationships are shown in Figure 3.1-1. Figure 3.1-1 shows the interrelationship of management activities (i.e., timber harvest; grazing; road building, use and maintenance; and prescribed burning) and their effects on individual environmental components or individual environmental systems (e.g., the riparian system or hydrological system). It also shows how the effects on one environmental component cascade to other environmental components. As indicated in the footnote to Figure 3.1-1, only the environmental components contained in boxes with heavy outlines have individual thresholds of significance defined. The environmental components in normal-lined boxes do not have an individual threshold but do influence the environmental components with individual thresholds.

The arrowed lines in Figure 3.1-1 show the relations between management activities, environmental components, and environmental components with thresholds of significance. For example, timber harvest can influence the riparian system (including all the environmental components listed under it) and through that effect can influence water quality objectives (including all the environmental components with thresholds of significance listed under it) which in turn can influence the attainment of a properly functioning aquatic ecosystem. Timber harvest also influences the properly functioning aquatic ecosystem directly through all the components of the riparian system (i.e., the arrow from the Riparian System box to the Properly Functioning Aquatic Ecosystem box). Finally, specific relationships are also indicated. Within the riparian system, for example, shade directly effects water temperature and dissolved oxygen.

Figure 3.1-1. Thresholds of Significance and their Relationship to Management Activities and Environmental Components[1/]



1/ Management activities and environmental components within normal-lined boxes influence environmental components that have Thresholds of Significance (TOS) . Environmental components within bold-lined boxes have individual TOS.

Based on the above, the discussions of effects and the determinations of significance consider all the interrelationships shown in Figure 3.1-1. The effects analysis in the fish and aquatic habitat section, for example, integrates the effects of the water quality objectives, riparian system, hydrologic system, upslope system, and channel morphology to evaluate the full effect of each alternative and its associated mitigation. Of all these systems, however, only the properly functioning aquatic ecosystem and water quality objectives have their own thresholds of significance. Because the analysis in Section 3.8 Fish and Aquatic Habitat considers such a wide range of effects, it must necessarily be more generalized with respect to these items than the individual sections (e.g., Section 3.7 Wetlands and Riparian Lands). The individual effects, however, are discussed in detail in the interrelated sections. For example, the effects of timber harvest and road-related mass wasting are detailed in Section 3.6 Soils and Geomorphology.